



# Installation Guide For:

# **IRON RAILING**





## Call 1-800-335-5909 for Installation Support

## This Packet <u>MUST</u> Accompany Materials To Job Site

## **Extra Screws Included**

## TABLE OF CONTENTS

POSTS1	
CAP RAIL CLIP6	5
PANELS & BRACKETS7 UNIVERSAL BRACKETS8	7 3
GATES17	7
ACCENT TOP RAIL19	)
SECONDARY HANDRAIL	1



# Fe<sup>26</sup> IRON RAILING SIMPLIFIED







It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Fe<sup>26</sup> Posts must always be secured to the deck framing. Fortress Fe<sup>26</sup> Posts should never be attached to only the deck boards.

#### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. Allow paint to dry.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.





Please contact ADI with any questions:

Ph: 1-800-335-5909 Fax: 800-203-4495 Web: www.absolutedist.com Email: sales@absolutedist.com



It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Fe<sup>26</sup> Posts must always be secured to the deck framing. Fortress Fe<sup>26</sup> Posts should never be attached to only the deck boards.

#### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. Allow paint to dry.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.





#### Please contact ADI with any questions:

Ph: 1-800-335-5909 Fax: 800-203-4495 Web: www.absolutedist.com Email: sales@absolutedist.com



It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation . The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

#### Fortress Iron Posts must always be secured to the deck framing. Fortress Iron Posts should never be attached to only the deck boards.

Required Materials: Wood Blocking, 3/8" X 3-1/2" (10mm x 89mm) Hex Head Galvanized Bolts (4 for each post) , 3/8" (10mm) Galvanized Washers (4 for each post), 3/8" (10mm) Fender Washers (4 for each post), 3/8" (10mm) Split Lock Washers (4 for each post), and 3/8" (10mm) Hex Nuts (4 for each post).



• Blocking must be constructed with treated dimensional lumber.

- Attach all blocking with #10 X 3-1/2" (89mm) deck screws.
- Wood Block must be constructed with treated dimensional lumber with a minimum thickness of 1
- Secure Wood Block to blocking on all four sides with #10 X 3-1/2" (89mm) deck screws.

-1/2" (38mm) .





#### **Surface Mounting Fortress Iron Posts Installed** on a Wood Deck



- Iron Post Base Plate holes **MUST** be positioned a minimum 1/2" (13mm) from edge of deck board.
- Use only 3/8" (10mm) Hex Head Galvanized Bolts. Lag Screws should NOT be used.
- Secure each post with four bolts.





Please contact ADI with any questions: Ph: 1-800-335-5909 Fax: 800-203-4495

Web: www.absolutedist.com Email: sales@absolutedist.com



It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company nor its distributors shall not be held liable for improper or unsafe installations.



- The Cap Rail Clip is not intended for structural use
- Not designed for use with Fortress Fe<sup>26</sup> Ring Top Accent Top Panel
- Minimum thickness of wood top rail is 3/4"(19mm)
- Maximum recommended wood top rail width is 5-1/2"(140mm)
- If the wood top rail is to be stained, complete staining before installation
- 1. Cut the wood top rail to the required length.
- 2. Center wood top rail on Fe<sup>26</sup> Traditional Railing Traditional Panel and clamp.
- 3. Position a Cap Rail Clip a maximum of 6" (152mm) from the post at each end of wood top rail and mark the screw hole locations on the wood top rail.
- 4. Space remaining Cap Rail Clips a maximum of 28" (711mm) on center along the wood top rail and mark the screw hole locations on the wood top rail.
- 5. Remove the wood top rail and pre-drill at marked screw locations with a 1/16" (2mm) drill bit.
- 6. Reposition wood top rail and secure Cap Rail Clip with supplied screws using a T-20 bit.



# IRON RAILING

## PANELS AND BRACKETS





#### Installation Instructions for Fe<sup>26</sup> Traditional Railing Panels with Universal (UB) Brackets and Fe<sup>26</sup> Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Fe<sup>26</sup> Posts must always be secured to the deck framing. Fortress Fe<sup>26</sup> Posts should never be attached to only the deck boards.

#### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.

#### **Required Materials**

Drill, 3/16"(5mm) Drill Bits, T-25 Driver Bit, Drill Bit Extender, Tape Measure, Wrenches, Speed Square, Center Punch, and Hammer.

#### Mount Fe<sup>26</sup> Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2"(38mm).
- Position the edge of Fe<sup>26</sup> Post base plate a minimum of ½"(13mm) from the inside edge of rim joist.
- Mount Fe<sup>26</sup> Posts at appropriate points based on panel length.
- Attach Fe<sup>26</sup> Posts with 3/8" X 3-1/2"(10mm x 89mm) Hex Head Galvanized Bolts.





\*Reference Fortress Fe<sup>26</sup> Post mounting instructions



Please contact ADI with any questions:Ph: 1-800-335-5909Web: www.absolutedist.comFax: 800-203-4495Email: sales@absolutedist.com







UB Bracket Hole Locations for Fe <sup>26</sup> Traditional Panel Installations with Accent Top Panel			
Pre-Drilling with a 3/16" drill bit is required.			
Rail Panel ATP Panel Height Height	A* B C D F F G		
28"(711mm) 5"(127mm)	4" (102mm) 1/2"(13mm) 5/8"(16mm) 31"(737mm) 5"(127mm) 1/2"(13mm) 5/8"(16mm)	G→	
34"(864mm) 5"(127mm)	4" (102mm) 1/2"(13mm) 5/8"(16mm) 37" (940mm) 5"(127mm) 1/2"(13mm) 5/8"(16mm)		
40"(1016mm) 5"(127mm)		□   _ <b>▶</b>   <b>∢</b> _F	
*Dimension A positior *Dimension A is meas Remove all metal sh panel before bracke	ns bottom edge of rail 3-3/4"(95mm) above deck surface. sured from the bottom surface of post base. havings from deck, post base cover, post, and et is screwed to post to prevent rust stains.		
Fe <sup>26</sup> Traditional Pa	nel with Accent Top Panel (ATP) Installation with UB-04 a	nd UB-05	
When using UB bra should be cut from • If rails were cut to let • Check fit of rail betw • If using a Base Cover • Slide ATP panel over • Secure UB brackets t Use low speed settin • Drop Fe <sup>26</sup> Traditional • Secure rails with pro	ackets rails MUST be cut 1/2"(13mm) shorter that the distance between the end of each rail to keep rail panel centered between posts. Ength, file cut edges and coat with 2 coats of Fortress zinc based touch-up paint veen installed posts. r install it now by sliding over the top of Fe Post. r the top rail of the Fe Traditional Panel to Fe <sup>26</sup> Posts with provided T-25 Drive Thread Cutting Screws. Use two screw ing on drill. I Panel into installed UB brackets. by ided set screws at each UB bracket.	<b>en posts. 1/4</b> "(6mm) s per bracket.	
• Install UB-04 Caps by UB-05 Cap UB-05 Cup UB-04 Cap	P Slide ATP onto the top rail P OF Fe <sup>26</sup> Traditional Panel UB-04 Cup UB-04 Cup UB-05 Cap UB-05 Cup Pre-Drilled Post UB-04 Cup Pre-Drilled Slide ATP onto the top rail UB-05 Cup UB-05 Cup Pre-Drilled Slide ATP onto the top rail UB-05 Cup Pre-Drilled Slide ATP onto the top rail UB-05 Cup NB-04 Cap Base Cover Installed	et Screw	
UB-04 C	Cup UB-04 Cup		



It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company nor its distributors shall not be held liable for improper or unsafe installations.

Fortress Fe<sup>26</sup> Posts must always be secured to the deck framing. Fortress Fe<sup>26</sup> Posts should never be attached to only the deck boards.

#### **Read Instructions Completely Before Starting Installation**

#### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

Remove all metal shavings from the cut area

• File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.

• Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.

• Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.

#### **Required Materials**

UB-04, UB-04 Angle Kit, Drill, 3/16" (5mm) Drill Bit, Phillips Head Screw Driver, T-25 Driver Bit, Metal Cutting Saw, Tape Measure, Wrenches, Pencil, Speed Square, Center Punch, Support Blocks, Clamps and Hammer.

## 



Please contact ADI with any questions:Ph: 1-800-335-5909Web: www.absolutedist.comFax: 800-203-4495Email: sales@absolutedist.com

Important - Every stair installation will be different. The rise and run, post position, and post height all need to be carefully laid out before posts are permanently installed and Fortress Fe<sup>26</sup> Traditional Adjustable panels are cut.

#### Mount Fe<sup>26</sup> Posts\*

- Wood Blocking tied to deck frame must be installed and constructed with treated dimensional lumber with a minimum thickness of 1-1/2" (38mm).
- Position the edge of Fe  $^{26}$  Post base plate a minimum of  $\frac{1}{2}$ " (13mm) from the inside edge of rim joist.
- Mount Fe<sup>26</sup>Posts at appropriate points based on panel length.
- Attach Fe<sup>26</sup> Posts with 3/8" X 3-1/2" (10mm x 89mm) Hex Head Galvanized Bolts.





\*Reference Fortress Fe Post mounting instructions

#### **Determine Rake and Center Panel Between Fe<sup>26</sup> Posts**





#### Assemble Universal Bracket Angle Kit Assembly and Mark Rail Length

• Assemble the Universal Bracket Angle Kit Assembly to the Universal Bracket Cup with supplied screws. Do not over tighten hinge pin, as it will be temporarily removed in a later step.

• Place Universal Bracket Angle Kit against post and position the cup so that it is parallel to the rail. With a pencil mark the position where the rail meets the back wall of the UB Cup on the top of the rail. With bracket in the same position mark the hole locations of the Post Plate on the post. **DO NOT DRILL HOLES AT THIS TIME.** 

Repeat this step for all four Universal Bracket Angle Bracket Locations.



#### **Pre-Drill and Install Universal Bracket Post Plates**

• Remove c-clamps and panels.

• Mark the centerline of each post. The UB Brackets will be installed on the centerline, not the locations marked in the previous step.

- Use a center punch and hammer to mark the hole locations and pre-drill all bracket hole locations.
- Remove Hinge Pin from UB Angle Kit Assemblies.
- Attach UB Angle Kit Post Plates to post with supplied T-25 Drive Thread Cutting Screws.
- Reassemble UB Angle Kit Assemblies with Hing Pins

• Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.



#### Cutting Fortress Fe<sup>26</sup> Railing Traditional Adjustable Panels

• Rake the panel back to 90° and lay on a flat surface.

• Using a metal cutting blade, cut the rail at the four cutting mark locations from previous step. It is advisable to make a practice cut on a scrap piece of rail before proceeding with the finish cuts.

• The distances from the first picket to the ends of the rail, will be different from the top to bottom rail. The greater the angle of the steps the more visible the difference will be. This is required in order to keep balusters pickets parallel to the post.

• File cut edges and coat with 2 coats of Fortress zinc based touch-up paint.







# Fe<sup>26</sup> IRON RAILING SIMPLIFIED





**)R**T**R**ESS<sup>\*</sup> Installation Instructions for Fortress Fe<sup>26</sup> Gate Uprights

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Fe<sup>26</sup> Posts must always be secured to the deck framing. Fortress Fe<sup>26</sup> Posts should never be attached to only the deck boards.

#### **Read Instructions Completely Before Starting Installation**

#### Note

When cutting Fortress railing, it is very important to complete the following at cut points. Not following the below steps will result in rust at the cut areas:

Remove all metal shavings from the cut area

ING PRODUCTS

- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. Allow paint to dry.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent rust on the surface.

#### Required Materials

Eye Protection, Drill, 10mm Driver Bit, Metal Cutting Saw, File, Tape Measure, Pencil, Touch Up Paint and Rubber Mallet.

## Fortress Fe<sup>26</sup> Gate Upright Assembly

- Maximum gate width is 48" (1219mm)
- If using Fortress Gate Kit #2, allow 3/4"(19mm) space between Fe26Gate Uprights and posts on each side for hinges and latch.
- Max spacing between the Fortress Fe<sup>26</sup>Gate Upright and the first baluster on each side of gate is 3-7/8"(98mm) .

• Determine the required length of panel between Fortress Fe<sup>26</sup> Gate Uprights add 1-3/8" (35mm) to each end of rails. The extra rail length is used to secure the panel to the Fortress Fe<sup>26</sup> Gate Uprights. Balusters may need to be removed. • Align Fortress Fe<sup>26</sup> Traditional Panel top and bottom rails with Fortress Fe<sup>26</sup> Gate Uprights. Using a rubber mallet drive Fortress Fe<sup>26</sup> Gate Uprights into the rails.

• Using a drill and 10mm driver bit install 1-10mm self drilling screw into each corner. Install the screw inside of the Fortress Fe<sup>26</sup> Gate Upright so that all screws are hidden.

• Install supplied 1-1/2" (38mm) Pressed Dome Caps on installed gate.





Please contact ADI with any questions:

Ph: 1-800-335-5909 Fax: 800-203-4495

Web: www.absolutedist.com Email: sales@absolutedist.com

3

# Fe<sup>26</sup> IRON RAILING SIMPLIFIED

ACCENT TOP RAIL





### Installation Instructions for Fortress Fe26 Accent Top Rail

(ATR) on Traditional Panels with Universal Brackets and Fe26

Posts

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company or its distributors shall not be held liable for improper or unsafe installations.

Fortress Posts must always be secured to the deck framing. Fortress Posts should never be attached to only the deck boards.

#### Note

When cutting Fortress railing, it is very important to complete the following at the cut points. Not following the below steps will result in rust at the cut areas:

- Remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio or balcony to prevent damaging the deck surface.

#### **Required Materials**

Saw with a ferrous metal blade, Tape Measure, Touch Up Pain, File, Caulking Gun, Fortress Epoxy, and Eye Protection

#### Fe<sup>26</sup> Accent Top Rail (ATR) Installation

#### Fortress Fe<sup>26</sup> ATR can only be installed on Fortress Fe<sup>26</sup> Traditional Panels installed with UB-04 Brackets.

- Install Fe<sup>26</sup> Traditional Panel with UB-04.
- Remove the UB-04 Caps from the top rail.
- Measure the distance between posts.
- Cut an equal distance from each end of ATR so that ATR Spacers are evenly spaced.
- Check the fit of ATR onto installed Fe<sup>26</sup> Traditional Panel.
- File any rough edges from cuts and apply zinc based touch up paint.
- Do not apply epoxy until all ATR's are cut and tested to fit. Fortress Epoxy has a short working time.
- Apply a quarter sized drop of Fortress Epoxy to each ATR Spacer. Follow cure times specified on epoxy packaging.
- Install ATR onto rails. Ensure that ATR is installed level with panel top rail.
- Let Fortress Epoxy cure. Do not apply any force to installed ATR for 2 hours.





Please contact ADI with any questions:Ph: 1-800-335-5909Web: www.absolutedist.comFax: 800-203-4495Email: sales@absolutedist.com

## HANDRAILS SIMPLIFIED







#### Installation Instructions for Fortress Round Hand Rail & Accessories

It is the responsibility of the installer to meet all code and safety requirements as well as obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The Fortress Company and its distributors shall not be held liable for improper or unsafe installations.

#### **Read Instructions Completely Before Starting Installation**

#### Note

Not following the below steps could result in oxidation at cut points and will void the warranty. When cutting Fortress Railing Products, complete the following at cut points:

- · Cut material to length and remove all metal shavings from the cut area
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime or dirt from the panel.
- Apply two coats of Fortress touch-up paint to the cut area.
- Be sure to remove any metal shavings from the work surface to prevent oxidation on the surface.

#### **Required Materials**

Drill, 5/32" Drill Bit, T-25 Driver, Tape Measure, Speed Square, Level, Fortress Epoxy, Metal Cutting Saw, File, Brush or Rags, Cardboard, Fortress Zinc Based Touch-Up Paint.





Please contact ADI with any questions: Ph: 1-800-335-5909 Web: www.absolutedist.com Fax: 800-203-4495

Email: sales@absolutedist.com

## Round Hand Rail Bracket Used to attach Round Hand Rail

Used to attach Round Hand Rail Components to Posts and Vertical Wall Surfaces.





#### **Round Hand Rail**



#### **Round Hand Rail Splice**

Used to join mating parts of the Round Hand Rail System that do not already have ribbed insert sections.

![](_page_24_Figure_8.jpeg)

#### **Round Hand Rail Cap Plug**

Used to cap open ends of the Round Hand Rail System.

Can Also be used to terminate a Round Hand Rail into a vertical wall surface by pre-drilling at the molded center point and securing to wall surface with a screw.

![](_page_25_Figure_3.jpeg)

#### **Round Hand Rail Angle Adjuster**

![](_page_25_Figure_5.jpeg)

![](_page_25_Figure_6.jpeg)

![](_page_25_Picture_7.jpeg)

![](_page_27_Picture_0.jpeg)

Marketed and Distributed by:

![](_page_27_Picture_2.jpeg)